HUNTING IN RURAL AREAS OF BACKA

Risto Prentovic¹, Arsen Kurjacki², Drago Cvijanovic³

Summary

The aim of the study was to determine whether hunting, and with which activities in the rural areas, correlate, and whether, as such, may contribute to the development of rural communities in Backa. The used methods in this paper are: fieldwork (systematic observation and interviews), analysis (literature and documentation) of content and statistical methods. The study also revealed that hunting, which is located entirely in rural areas, which are, in fact, the only hunting areas and hunting wildlife habitats, is important and profitable area of business, and that hunting tourism, as the most propulsive part of hunting, is in the correlation and complementary relationship to rural tourism in Backa. To achieve even better integration of hunting in the rural development of Backa, it is necessary to prevent and eliminate the effects of certain limiting factors.

Key words: Backa, hunting, rural areas, development

JEL: Q01, Q57

1. Introduction

The term «rural area» means the area whose main feature is primarily the use of land for agriculture and forestry. Council of Europe, defines the term «rural area» as «part of the country in the interior or on the coast, which includes smaller towns and villages, where the main part of the territory is used for: a) agriculture, forestry, aquaculture and fisheries, b) economic and cultural activities of the population of that rural area (crafts, industry, services), c) non-urban recreation and leisure activities, and d) for other purposes, such as housing» (Lazic etc. 2007, p. 18). According to Anderson (2003) rural area includes the people, the land in open natural areas and rural areas beyond the immediate economic impact of major urban centers.

¹ Prof. dr Risto Prentović, Faculty of Natural and Mathematical science, University of Novi Sad, Bul. Despota Stefana 18, Novi Sad, Serbia, Phone: +381 21 460 309, E-mail: riprent@open.telekom.rs
² Arsen Kurjački, M.A., Gl.inž.z.z.s., Panonske TE-TO, Bul.Oslobodjenja 100, Novi Sad, Phone: +381 64 8362 795, E-mail: arsen.kurjacki@panonske.rs
³ Prof. dr Drago Cvijanović, science consultant, Institute of Agricultural Economics, 11060 Beograd, Volgina 15, Serbia, Phone: +381 11 2972 858, E-mail: drago_c@iep.bg.ac.rs
In most cases, rural areas have rich ecosystems and fairly preserved biodiversity, which provides favorable conditions for development of, other than agriculture and forestry, economic activities such as water management, tourism, craftsmanship, urban planning, fishing, hunting, etc. Bačka is an area in Vojvodina (northern Serbia), which represents a rural area\(^4\) with a high level of agricultural production, sufficient level of infrastructure potential and relatively positive demographic trends, with Novi Sad as the administrative, cultural, and educational center. As such, this area has a number of competitive advantages in the field of economy and overall development. Hunting is an economic activity that, at first glance, takes no considerable part in the development of rural areas, and is, in our country, most developed in Backa, which represents one of the most advanced hunting destinations in Europe\(^5\). Because the areas in which hunting game is grown and used (hunting grounds), are located entirely in rural areas, there is no doubt that hunting is one of the segments of the rural economy, and thus of the rural development.

The aim of this study was to determine whether hunting, and which activities in the rural areas, correlate, and whether, as such, may contribute to the development of rural communities in Backa.

2. Research methodology

In addition to basic scientific and logical processes (analysis, synthesis, induction, deduction, abstraction, generalization, comparison), this research applied the following scientific methods: field research (systematic observation and interviews), analysis (literature and documentation) of contents, cost - benefit and SWOT analysis, the statistical method (descriptive statistics). The sample of the research are the hunting grounds\(^6\) and overall hunting management in three municipalities in Backa: Ada, Becej and Srbobran, which in recent years participated in the implementation of rural development programs of the European Union aimed at the economic development of local governments (IPA projects of regional cooperation).

3. The concept and importance of hunting

In the literature there are many definitions of hunting. According to the Law on Hunting (“RS Official Gazette”), hunting is the protection, breeding, hunting and harvesting of

\(^4\) According to the definition of rurality, Backa as distinctly agricultural region, can be considered rural area, as most of the settlements in Backa, as indicators of population density show, agricultural activity, and the age structure of the population in rural category.

\(^5\) This can be concluded from a number of texts on hunting that are of professional character as such. Prentović (2004), Dragin (2005) and others. As a result of respectful hunting areas (hunting grounds) and quality hunting management in Bačka were hunted capital specimens of wild animals, which trophies worn the titles of world and national champions.

\(^6\) The hunting area is specified area of land, water and forests, surrounded by natural boundaries, which represents the habitat of wild game, in which the effects of environmental (natural, anthropogenic and other) factors allows its cultivation, protection and sustainable use.
HUNTING IN RURAL AREAS OF BACKA

wildlife as a natural resource, and hunting, since the main purpose of hunting includes hunting and trapping of wildlife for the purpose of providing meat, skins and trophies and collecting eggs of game birds. What follows from the previous and other definitions, shows that hunting is not only an element, but the main theme and content of hunting, so it is necessary for this term to be defined more precisely. Instead of quoting a number of definitions of hunting given by different authors, the definition given by Prentović (2006) seems to be sufficient: “Hunting is a recreational hobby activity with elements of a sport competition of a number of people (hunters) motivated by their strong need for hunting (shooting and trapping) game in order to experience a sort of pleasure and enjoyment, and to obtain certain economic benefits (by hunting) by obtaining the meat, skin, trophies and other parts of the game.

In some definitions of hunting the emphasis is placed on some of its essential features (ecological and economic), so that the hunt, as the main activity of hunting, is not mentioned. In that sense, the (alternative) definition of hunting according to the Law on Wild Animals and Hunting, according to which hunting includes editing and fitting hunting grounds in accordance with the principles of maintaining ecological balance and environmental protection standards, and has special social significance, because the game and hunting areas are natural resources of particular concern. Maric also (2003), in the definition of hunting, puts emphasis on its ecological function.

Selmic and associates (2001) in the definition of hunting favors its economic dimension and define it as “economic activity, which cannot be accurately considered production or service. It includes both terms, because it involves cultivation, preservation and use of harvested game, which could be considered a productive activity and defined as the concept of hunting management. It also, includes hunting tourism, as the most profitable part of the hunting economy, which could be considered to be a service activity.” Hunting is an important activity that brings significant economic benefit. In the United States, according to Montgomery and associates, only in 2006, 12.5 million hunting participants, of over 16 years of age, made a turnover exceeding 25 billion dollars. Annual consumption per hunter is 1192 dollars, or $110 per day of hunting (Montgomery and Blalock, 2010). The same authors state that other activities besides hunting, especially in rural areas, significantly increase employment, and thus increase the economic income of local communities through the collection of fees for residence and hunting, selling their services and products, and more. According to the data of the Service for the Protection of Nature in New Jersey, USA, (www.state.nj.us / dep / FGW / news / feeinners) on the basis of the issued licenses to hunt, only in the course of 2000, the state obtained a profit of 3.8 billion U.S. $, and the bulk of the funds was invested in the conservation of nature. According to research by Bohne (Bohne, 2008) trophy hunting in Tanzania, which includes tourism, sports and safari, plays an important role in rural development, because in the period of 1998-2003 the economic profit increased by 347.7%, and rose to nearly $40

---

7 Ecological function of hunting is reflected in the fact that it is also directed to the protection, preservation and enhancement of habitat conditions for the existence of wildlife, as well as nursing, health care and planned exploitation of wild animals, which can largely preserve the natural environment and biodiversity of flora and fauna.
million, and has a linear trend, with the annual increase of about $162,000 U.S. According to the observations made in Norway (Skonhøft, 2006) reintroduction of the gray wolf in the Scandinavian countries during the last two decades, and his controlled shooting, enabled a significant increase in the revenue for the agricultural population, by reducing the number of mice and collection of fees for shooting.

In addition to environmental and economic aspects, hunting also has a health (recreation and active relaxation in a healthy natural environment), cultural (behavior in the spirit of hunting moral and the code of hunters ethics, artistic creativity inspired by motifs of nature, wildlife and hunting) and educational (education of not only hunters, but the broader population of young people and adults in the spirit of understanding, cultivation and protection of wildlife, nature conservation and preservation of biodiversity) meaning. The importance of hunting is reflected in its contribution to the development of other activities including: agriculture and forestry (encouraging the growth of those types of crops that are used for feeding the game, planting of trees, protection of forest stands and crops from damage done by wildlife, etc.), tourism (through activity of hunting tourism), hospitality (expanding restaurant network and use of game meat in their cuisine), commerce (selling the items of meat, skin, fur, horns, tusks, bones of wildlife, etc.), and other industries, as are travel and telecommunications industry, and also certain industries (for example those involved in the production of hunting weapons, ammunition, equipment, clothing, souvenirs, etc.). The special significance of hunting lies in the fact that modern hunting is conceived and constituted so that it is in the function of sustainable development. It means that hunting which represents a complex activity of managing wildlife populations for their protection, breeding (artificial production, population, health care, nutrition), hunting and rational use, as well as maintaining and improving the habitat conditions in hunting grounds, not only provides the optimum reproducibility of the existing wildlife populations according to the potentials of their habitats (biological and economic capacity of a hunting ground), but also aims to prevent and repair any damage wildlife may cause in a given ecosystem or biotope. Therefore, it does not significantly distort biological diversity and can be characterized as sustainable hunting.

4. Natural-geographical features of Backa

4.1. The geographical position of Backa

Bačka is located in the southern part of the Pannonian Plain and the northwest part of the Autonomous Province of Vojvodina, and occupies an area between 45º 16’ north latitude and 20º 37’ east longitude. Its area is 9244 km². The Tisa River separates it from Banat, while the southern border, towards Srem, is the Danube River. The western border represents the part of the state border with Croatia, which extends from Backa

---

8 The social importance of hunting and functions is discussed in more detail in: Prentović (2006., p. 53-60)
Palanka in the south, along the Danube to the north, to the border with Hungary. The northern border of Backa forms the border with Hungary.

4.2. Physical and geographical features of Backa

Land in Backa is built of sediment middle and upper Pleistocene and Holocene age-river and eolian sediments. It is a plain land, altitude from 76 m to 143 m. There we can underline loess plateau, loess terraces, alluvial plains and sandy soil.

Climate in Backa is steppe continental, with four marked seasons. Summers are hot and dry, and winters are relatively cold. Mean annual temperatures are from 10.5 – 11.2 °C, and rainfall is about 600 ml. Typical winds are north, northwest and wind cold Kosava.

The most important headwaters are rivers Danube and Tisza, and the Great Backa Canal, rivers Jegricka, Krivaja etc.

In Backa vegetation is cultural-steppe, with very little forests (about 3.5%) and those are mostly black locust, linden, willow, beech and others.

Fauna of Backa, among others, is make from rabbits, deer, wild boars, foxes, jackals, and pheasant, field partridge, pigeons, doves, waterfowl and others.

4.3. Natural resources of hunting in Backa

The main natural resources are game species, as a direct economically exploitable category, and hunting grounds that represent wildlife habitat and areas where all the important activities of hunting management take place (growing, protection and rational use of wildlife through hunt, sale of shot game and its trophies, as well as the sale of live animals and, in particular, hunting tourism).

The hunting grounds of Backa (which are 43) spread over 899,537.2 hectares and are located (by the Regulation on the establishment of hunting areas in the territory of the Republic of Serbia) within three hunting areas: North Backa, South Backa and East Backa. These hunting areas are managed by the following users (Table 1)

<table>
<thead>
<tr>
<th>No.</th>
<th>Name of the user</th>
<th>Number of users</th>
<th>Number of hunting grounds</th>
<th>Area of the hunting ground (ha)</th>
<th>Percent of hunting area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hunters association of Vojvodina (through hunters associations)</td>
<td>26</td>
<td>27</td>
<td>852149</td>
<td>94.73%</td>
</tr>
<tr>
<td>2.</td>
<td>Public company “Vojvodinasume”</td>
<td>1</td>
<td>7</td>
<td>33274.6</td>
<td>3.70%</td>
</tr>
<tr>
<td>3.</td>
<td>Serbian armed forces (hunting ground “Karadjordjevo”)</td>
<td>1</td>
<td>1</td>
<td>6914.6</td>
<td>0.77%</td>
</tr>
<tr>
<td>4.</td>
<td>Fishermens grounds</td>
<td>7</td>
<td>7</td>
<td>4662</td>
<td>0.52%</td>
</tr>
<tr>
<td>5.</td>
<td>Agricultural company “Zobnatica” - Backa Topola</td>
<td>1</td>
<td>1</td>
<td>2537</td>
<td>0.28%</td>
</tr>
</tbody>
</table>

Source: Hunting ground’s management
Vegetation structure of hunting areas in Backa is shown in Table 2.

### Table 2. Vegetation structure of hunting areas in Backa

<table>
<thead>
<tr>
<th>No.</th>
<th>Vegetation structure</th>
<th>Area (ha)</th>
<th>Share in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Forests and forest lands</td>
<td>32,109.03</td>
<td>3.57</td>
</tr>
<tr>
<td>2.</td>
<td>Meadows and pastures</td>
<td>47,722.61</td>
<td>5.31</td>
</tr>
<tr>
<td>3.</td>
<td>Arable land</td>
<td>719,886.28</td>
<td>80.03</td>
</tr>
<tr>
<td>4.</td>
<td>Orchards and Vineyards</td>
<td>14,703.66</td>
<td>1.63</td>
</tr>
<tr>
<td>5.</td>
<td>Ponds, swamps and water</td>
<td>14,656.41</td>
<td>1.62</td>
</tr>
<tr>
<td>6.</td>
<td>Other land</td>
<td>75,059.27</td>
<td>8.34</td>
</tr>
<tr>
<td></td>
<td>Total hunting ground area</td>
<td>889,537.20</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Source: Hunting ground’s management

According to data provided by Prentović and Dragan (2007) funds of major cultivated species of game in Backa are the following:

1. Hunting areas managed by hunting associations: 20,359 deer, 138,917 rabbits, 58,887 pheasants and 9753 partridges;
2. The hunting grounds of the public company “Vojvodina-sume”: 2,014 elks, 42 of fallow deer, 121 mouflon, 728 deer and 1,525 wild boars;

When the hunting grounds within fishery farms are concerned (where the main cultivated species are waterfowl), data is not shown, because entities that manage wildlife species do not determine or do not show their annual fund in the form of hunting records. The same applies to some other species that are abundant in the hunting grounds in Backa: foxes, wild pigeon, turtle dove, quail, Snipes etc. No data is available for the hunting ground of the Agricultural Enterprise “Zobnatica” from Backa Topola, in which, after the privatization, hunting management has remained private.

The major cultivated species of wildlife in all three hunting grounds (“Pheasant” from Ada, “Becej farms” from Becej and “Pheasant” from Srbobran) are: the deer, rabbit and pheasant. These are the most widely spread types of game in Backa. Numbers of hunting deer and rabbit hunting in the period from 2006 - 2010 are shown in Table 3.11

---

10 Contingent of the cultivated species of wildlife is determined in March each year by the organized counting with adequate methodology. Funds of game are, otherwise, dimensioned by the economic capacity of the hunting ground and are approximated for a longer period of time. It may be reasonable to assume that the current state of the wild game in Backa approximate values shown by the quoted authors.

11 Due to incomplete records of date of users of hunting grounds in this table are not shown the contingent and hunted numbers of pheasant game. Also, in the available records of the harvested game, the distinction between hunters-tourists and local hunters has not been made.
### Table 3. Overall number and number of harvested game in the period of 2006 – 2010.

<table>
<thead>
<tr>
<th>Place</th>
<th>Year</th>
<th>Deer</th>
<th>Rabbit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Contingent</td>
<td>Hunted</td>
</tr>
<tr>
<td>Srbobran</td>
<td>2006.</td>
<td>335</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>2007.</td>
<td>392</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>2008.</td>
<td>468</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>2009.</td>
<td>424</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>2010.</td>
<td>541</td>
<td>32</td>
</tr>
<tr>
<td>Becej</td>
<td>2006.</td>
<td>640</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>2007.</td>
<td>616</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>2008.</td>
<td>680</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>2009.</td>
<td>675</td>
<td>70</td>
</tr>
<tr>
<td></td>
<td>2010.</td>
<td>807</td>
<td>76</td>
</tr>
<tr>
<td>Ada</td>
<td>2006.</td>
<td>395</td>
<td>38</td>
</tr>
<tr>
<td></td>
<td>2007.</td>
<td>403</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>2008.</td>
<td>512</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>2009.</td>
<td>694</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>2010.</td>
<td>793</td>
<td>45</td>
</tr>
</tbody>
</table>

Source: Hunting association of Vojvodina (according to: Kurjacki – master’s thesis)

### 4.7. Hunting and rural development

The main intention of the modern social and economic courses is a complex development on the basis of the available natural, financial, infrastructural and human resources, in accordance with the necessity to maintain a balance between nature and man, which is defined as “sustainable development.” From the aspect of rural areas such development is defined as “rural development” which can be defined as an integrated, territorially rounded rural economy, which consists of a set of interrelated economic activities and other activities, which in addition to primary agricultural production includes manufacturing, forestry, hunting, fisheries, water resources, trade, tourism, craftsmanship, and numerous activities related to regional planning, education and continuous training, protection of human health and ecological balance (Maksimovic, 2010).

Rural areas are rich in biodiversity and ecosystems, so that from that point of view hunting or hunting management may represent a significant contribution to rural development, by the economic as well as social and ecological aspects.

Pursuant to all above mentioned, as well as to the existence of century-long tradition of hunting and hunting ethics in Backa, hunting itself has significantly improved over the recent years. Progress is measured through two major segments of the hunting industry:

- increase in population of high quality cultivated species of wildlife
- hunting tourism promotion, primarily through better marketing access to foreign markets.
There is the necessity of diversification of agriculture in rural areas, while meeting the need of introducing various economic activities in the agricultural activities of households, which thus gain the possibility of additional revenue. The travel industry, or hunting tourism as its selective form, may represent the quickest and most economical way of rural development. So, hunting, or hunting tourism, as one of the most promising tourist industries, represent a possible crucial factor in the development of rural areas, rich in many species of wildlife, unspoiled nature, organic farming, especially where farm and agro-tourism have already been developed over the last twenty years (Dernoi, 1983.; Marsden and Sonnino, 2008).

5. Hunting tourism as a function of rural development

5.1. The concept and basic characteristics of hunting tourism

In the literature there are few relevant definitions of hunting tourism. It seems that the most acceptable is that which under this form of economic activity involves “moving and active staying of tourists-hunters in a specific environment-hunting area, as a part of a healthy natural environment, for hunting (shooting, capturing, watching or recording) game, allowing his actors (hunters-tourists) to satisfy a strong motive (primarily a hobby, leisure activity for some and passion for others). At the same time they pay a fee for the shot game (trophies, meat, leather, etc.), accommodation and food in adequate tourist facilities, and other contracted services, following the valid price lists” (Prentovic, 2008.).

Specificity of demand in hunting, as compared to other forms of tourism, is in its multiple layers, which is based on the specific needs of tourism-hunters, and those are, in addition to hunting, active leisure and recreation; staying in a healthy natural environment; enjoying the natural beauty or the exotic ambience of hunting areas with specific biocenosis and attractive species of flora and fauna, education for successful hunting-tourism activities, etc.. On the other hand, the hunting-tourism product12, in addition to various and trophy valuable hunting game, assumes other types of services, and above all: accommodation, food, transportation, educational services, cultural-animational and recreational conditions and activities, and others.

As a segment of hunting, hunting-tourism is closely associated with a number of economic and non-economic activities, especially with forestry, agriculture, water management, sports, education, science, and others. This is so because the hunting-tourism in the process of creating a “product” leaning on the resources of these area. So, for example, forestry, agriculture and water management provide for hunting, and through it also for hunting-tourism, the necessary spatial and environmental milieu for the existence of wild life, as a main motive of hunting-tourism recreation, which also represent the grounds for carrying out tourism hunting as a major segment of hunting-tourism offer. The listed non-economic activities provide the elements for completing the hunting-tourism offer by including sports facilities, educational, cultural-performances and of scientific-professional character. Hunting-tourism

12 Details on hunting tourism product is discussed in Prentovic (2005, p. 103-161)
gives something back to these (economic and non-economic) activities by enabling them to share in the distribution of income earned through the hunting-tourism sale. Being a part (a segment, selective form) of tourism, hunting-tourism is correlated with industries such as catering, transport, trade, crafts and other. This is because in the structure of the hunting-tourism product lodging services, meals and transportation of tourist-hunters, the supply of various essential items (weapons, ammunition, equipment), souvenirs and providing them with certain services (repairing weapons, equipment, etc..) comprise a significant part of hunters’ activities.

5.2. Correlation of hunting and rural tourism

The term ‘‘rural tourism’’ has been accepted by the European Union, and as such it applies to all tourism activities in rural areas (according: Lazic and al., 2007). More specifically, it is ‘‘a wide range of activities, services and pleasures provided by farmers and peasants in order to attract tourists to their area in order to create additional income’’ (same source). As defined by the WTO (2004.) rural tourism is a complex composed of several segments: natural, rural environment (rivers, lakes, forest), rural cultural and spiritual things (architecture, churches and monasteries), ethno tourism (traditional food, music, customs) and rural activities such as horseback riding, fishing, hunting (Molera and Albaladejo, 2007.).

According to Vujovic et al 2011, economic theory and empery treat tourist as consumer. Economy creates economic behaviour of each person - tourist. Free time and free money resources as two basic initiators in tourism, tourist as consumers realize according to economic activities. Developmental aspects of tourism from the aspect of individuals as consumer-tourist, considers spending of available financial assets and free time, as well as income if person is on side of offer.

Additionally Gajic (2009) found that generally region of Vojvodina has never characterized for mass tourism, although that is a branch of economy which could be potential solution for many problems, before all unemployment. It’s known that number of tourists in Vojvodina is not in proper correlation with all anthropogenic and natural resources.

In accordance with the principle of diversification of the economy in rural areas, dealing with tourism can be a very significant segment of the development of local communities (Komppula, 2004.). Rural tourism is the tourism rural areas with all activities that are carried out in there. Nature is the main resource for the development of rural tourism. By the introduction of new non-agricultural activities (especially of rural tourism) additional income can be obtained that will enable the improvement of the quality of life and stop the demographic decline in rural areas (Courthey et al., 2006.). The Tourism Development Strategy of the Republic of Serbia for the period from 2005 to 2010, sets the rural tourism among its medium and long term goals. Rural tourism is treated as an additional important economic sector, which will improve and ensure the sustainable development of rural communities, in order to generate additional income.
to the rural population, comprising a number of tourist attractions, services, secondary activities that are provided by rural residents and private households.

Rural tourism includes a wide range of activities, services and pleasures provided by farmers to attract tourists to their area in order to create additional revenue (Hall, Kirkpatrik and Mitchell, 2005.). It serves to stimulate economic growth, increase the possibility of underdeveloped areas, and to improve the living standards of the local population. Rural tourism seems to be a suitable tool for revitalization of abandoned rural areas and ensures their sustainability in the future, by keeping jobs or creating new jobs, increasing the diversity of professions, landscape and nature conservation or support the preservation of rural crafts as a tourist attraction (Brandt and Haugen, 2010.). Rural tourism is often considered a form of tourism that is inherently sustainable, that attracts few visitors, that he does not need a large infrastructure development, and in which tourists are usually genuinely interested in the local culture and tradition. However, if we analyze farm tourism a little more deeply, there are also doubts over the sustainability. The most significant effect that should be explored is the economic profitability of rural tourism services. In fact, the demand is often seasonal, the occupancy rate is low and investments that are required to create or improve facilities for tourists are often high (Getz and Carlsen 2000, Deller, 2009.).

Although rural tourism is seen as an important and promising form of tourism in our country, Kurjacki found that the rural population in Backa is sufficiently interested in providing this type of tourism services (2011). The exceptions to this are households on Backa farm households, which accept rural tourism also dealing with eco and ethno tourism. These households are also known for the production of healthy food in natural conditions and mostly attract a clientele from economically developed countries.

These farm households have preserved environmental values, furniture and memorabilia from the early days of their creation, and they are suitable for active vacation, recreation and fishing, because they are located near waterways. A few households are able to receive tourists. Special feature of this ‘farm household’ tourism is reflected in the possibility of preparing food in the old, traditional way, in ‘peasant-made, simple’ ovens. For the tourists, hosts organize ‘disnotors’, meaning the slaying of pigs, drying meat, making potato quishes and traditional fruit pies and other special dishes of Vojvodina. Hunting tourism, in addition to shooting game and other hunting activities, also has other motivational factors, and contents such as: culture, entertainment, education and other appropriate activities.

Hunting and rural tourism are multiply connected and intertwined, despite the fact that some authors consider hunting tourism an integral segment of rural tourism. Their correlation lies in the fact that their, largely overlapping part, destinations mostly located outside of urban areas, on the one hand, and that their services or activities are carried out in direct contact with nature and through direct use of natural resources, on the other hand. Association of hunting and rural tourism, accept in the physical sense, implicitly, is also present in the utility, receptive segment, potentially. On the other hand, correlation
HUNTING IN RURAL AREAS OF BACKA

and complementarity of these two selective forms of tourism, the potential and the real one, are, also, manifested in the domain of supply and demand, as well as in the provision of tourism services.\(^\text{13}\)

**5.3. Profitability of hunting in observed hunting areas**

To determine the profitability of hunting area, as well as to acquire the knowledge whether its economic benefits justify the investment in its future development, the financial statement data of three hunting area users were collected over the five year period (from 2007. to 2011), (Table 4.) and made the *cost-benefit analysis*.\(^\text{14}\)

**Table 4. Income and Expenses of hunting ground users (in RSD)**

<table>
<thead>
<tr>
<th>Place</th>
<th>Year</th>
<th>Income</th>
<th>Expenses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2007.</td>
<td>1,504,475</td>
<td>1,034,119</td>
</tr>
<tr>
<td>Srbobran</td>
<td>2008.</td>
<td>1,699,350</td>
<td>1,022,850</td>
</tr>
<tr>
<td></td>
<td>2009.</td>
<td>1,422,697</td>
<td>1,005,691</td>
</tr>
<tr>
<td></td>
<td>2010.</td>
<td>1,902,303</td>
<td>1,658,593</td>
</tr>
<tr>
<td></td>
<td>2011.</td>
<td>2,235,200</td>
<td>1,923,500</td>
</tr>
<tr>
<td>Becej</td>
<td>2007.</td>
<td>1,657,810</td>
<td>747,619</td>
</tr>
<tr>
<td></td>
<td>2008.</td>
<td>3,597,342</td>
<td>1,421,830</td>
</tr>
<tr>
<td></td>
<td>2009.</td>
<td>2,424,242</td>
<td>1,948,119</td>
</tr>
<tr>
<td></td>
<td>2010.</td>
<td>4,906,549</td>
<td>2,378,055</td>
</tr>
<tr>
<td></td>
<td>2011.</td>
<td>4,985,200</td>
<td>2,875,230</td>
</tr>
<tr>
<td>Ada</td>
<td>2007.</td>
<td>2,076,831</td>
<td>1,232,441</td>
</tr>
<tr>
<td></td>
<td>2008.</td>
<td>2,125,721</td>
<td>1,382,743</td>
</tr>
<tr>
<td></td>
<td>2009.</td>
<td>2,283,552</td>
<td>886,189</td>
</tr>
<tr>
<td></td>
<td>2010.</td>
<td>2,848,022</td>
<td>1,180,654</td>
</tr>
<tr>
<td></td>
<td>2011.</td>
<td>2,975,000</td>
<td>2,258,000</td>
</tr>
</tbody>
</table>

*Source: Financial statements of hunting clubs from Ada, Becej and Srbobran*

Revenues of users of hunting areas mainly consist of revenues from hunting area management, revenues from membership fees and other activities. The revenues from hunting area management are part of the membership of local hunters, the fee for the shooting of wildlife, both resident hunter-tourists, and foreign, income from selling trophies and meat from hunted game, and selling live animals, other direct revenue in hunting tourism (compensation for the organization of hunting for transportation, room and feeding) and others. Membership fees of hunters are divided. One part is for the functioning of the hunting club and other hunting associations, as well as part of the compensation for

\(^{13}\) Detailed correlation of hunting and rural tourism is considered in Prentovic (2008:b.p. 110-121). Otherwise, the space allotted for the writing of this study does not permit a more detailed elaboration of these thesis

\(^{14}\) *Cost-benefit analysis* is a method for determining the profitability of businesses based on their income and expenses, as well as for making investment decisions, which influences the development of specific region of the community or society as a whole (Ivanis, 2010.)
the shot game and for the need to invest in material assets in the hunting area. In addition to these, the most basic resources, revenue is gained by implementation of other, non-core, business activities, for which they are registered HC (Hunting Club) (archery, catering, real-estate, sport and music events, cultural events and other, as well as donations and sponsorships). The expenses of HC include buying and the import of pheasant chicks and adult pheasants, the cost of their care and feeding, as well as other wildlife, the investment and current investments in hunting areas, hunting tourism costs of implementation, the cost of terrain vehicles, the cost of professional services and hunting guard services, and a fee to the state for the use of wild animals. From the table it can be concluded that the revenue (depending on the amount of investment) is significantly higher than the expenditures of the hunting area, and that, as it is indicated by direct economic indicators, users of hunting area have positively operated over the last five years.

6. Conclusion

It is undisputed that hunting, which is correlated with other rural activities, is an important economic activity in rural areas in Backa and also represents a significant opportunity for development of the area. In order for this development opportunity to be realized, it is necessary that versatile and integrated engagement of a large number of subjects not only on local, but also at the provincial and national (state) level, in order to prevent and eliminate certain limiting phenomena, and the following in particular:

1) Illegal hunting and poaching, the negative impact of predators on game, intensive agricultural production, water economy (plastic materials clogging the irrigation facilities), industrial production (contamination of soil, water and air by emissions of waste materials), transport, natural disasters, biological agents (inducers and vectors of infectious diseases and others);

2) The damage that game passes to crops and forest stands;

3) Stimulating and motivating rural households to deal with, among other things, certain rural tourism activities, especially the cottage industry in the area of accommodation and meals for tourists, and therefore hunting tourists;

4) Affairs like ‘’Balkan birds’’ and the illegal trade of various kinds of game

5) Joint participation of hunting area users, hunting and tourism organizations, as well as local government authorities in promoting and sale of tourism products of the providers of hunting and rural tourism, and the possibility of linking and integrating (starting from

---

15 About that more detailed is discussed in: Prentovic, R. and Bradvarovic, J. (2008)
16 About that more detailed is discussed in: Prentovic, R. (2006), p. 113-121
17 About that more detailed is discussed in: Puzovic (2002)
the common needs of their clientele\textsuperscript{18}, in the domain of tourism demand, as well as in the field of tourism offer, or the provision of tourism services\textsuperscript{19}, etc..

In order to create optimal conditions in the modern transitional phase our country is going through, to achieve the complete and integrative connectivity and cooperation of the workers in hunting and rural tourism in our rural areas and a better integration of hunting tourism in the process of their development, it is necessary to create the conditions in which not only could the relevant economic and local community subjects be successfully coordinated, but (to the same end) other government institutions of interest for hunting and tourism would be involved and integrated. The same applies to the local government, tourist and hunting organizations, as well as to other interested subjects not only within the local community, but in the region of the Province of Vojvodina and the Republic of Serbia.

7. Literature


\textsuperscript{18} It seems that the common needs that determine the demand of potential hunting or rural-tourism clientele those in states of Loren (according to Lazic and others, p. 76) as follow: a) the need for nature, ie. need to live in symbiosis with the original environment, even for a short time; b) the need for the activity or motive for expression of behavior that provide pleasure and enjoyment, and c) the need for playing

\textsuperscript{19} More detailed about connecting and integrating the activities of hunting and rural tourism activities in the field of tourism demand, tourism offer and tourism services is discussed in Prentovic (2008 b), p. 116-120


HUNTING IN RURAL AREAS OF BACKA


35. www.state.nj.us/dep/fgw/feeiners

36. www.wikipedia.org enciclopedia.com
LOVSTVO U RURALNIM PODRUČJIMA BAČKE

**Risto Prentovic**²⁰, **Arsen Kurjackić**²¹, **Drago Cvijanovic**²²

**Sažetak**

Cilj rada je da se utvrdi da li je lovstvo, i sa kojim delatnostima u ruralnim područjima, u korelaciji i da li, kao takvo, može doprineti razvoju ruralnih zajednica u Bačkoj. U radu su korišćene metode: terenskog rada (sistematsko posmatranje i intervjuisanje), analiza (literaturnih i dokumentacionih) sadržaja i dr. i statistička metoda. Istraživanjem se došlo do saznanja da je lovstvo, koje je locirano u celosti u ruralnim područjima, a koja su, zapravo, i jedini lovni prostori odnosno staništa lovne divljači, značajna i profitabilna oblast privređivanja, a da je lovni turizam kao najpropulzivniji segment lovstva, u korelativnom i komplementarnom odnosu sa ruralnim turizmom u Bačkoj. Da bi se ostvarila još bolja integrisanost lovstva u intencije ruralnog razvoja Bačke neophodno je preduprediti i otkloniti delovanje određenih limitirajućih činilaca.

**Ključne reči:** Bačka, lovstvo, ruralna područja, razvoj.

---

²⁰ Prof. dr Risto Prentović, Prirodnomatematicki fakultet, Univerzitet u Novom Sadu, Bul. Despota Stefana 18, Novi Sad, Srbija, Tel: +381 21 460 309, E-mail: riprent@open.telekom.rs

²¹ Arsen Kurjački, M.A., Gl.inž.z.ž.s., Panonske TE-TO, Bul.Oslobođenja 100, Novi Sad, Tel: +381 64 8362 795, E-mail: arsen.kurjacki@panonske.rs

²² Prof. dr Drago Cvijanović, Institut za ekonomiku poljoprivrede, 11060 Beograd, Volgina 15, Srbija, Tel: +381 11 2972 858, E-mail: drago_c@iep.bg.ac.rs
CONTENT

1. Miletić Vesna, Milosavljević Dušan, Kostić Boban
   INSTITUTIONAL INVESTMENT POLICY FRAMEWORKS
   FOR THE AGRICULTURE OF THE REPUBLIC OF SERBIA . . . 363

2. Niţescu Cristina
   FACTORS ANALYSIS REGARDING THE GROSS
   PROFITABILITY OF WINE MARKET - CASE STUDY . . . . . . 375

3. Prentović Risto, Kurjački Arsen, Cvijanović Drago
   HUNTING IN RURAL AREAS OF BACKA . . . . . . . . . . . . 385

4. Rađivojević Dušan, Ivanović Sanjin, Radojičić Dušan,
   Veljković Biljana, Koprivica Ranko, Božić Steva
   THE NUTRITIVE AND ECONOMIC EFFECTS OF AEROBIC
   TREATMENT OF SOLID MANURE . . . . . . . . . . . . . . . . . 401

5. Ševarlić Miladin, Raičević Vuk, Glomazić Rade
   SUSTAINABLE DEVELOPMENT OF
   THE FARMERS’ COOPERATIVE SYSTEM IN AP VOJVODINA. 413

6. Đorđević Dejan, Bogetic Srđan, Ćočkalo Dragan, Bešić Cariša
   CLUSTER DEVELOPMENT IN FUNCTION OF IMPROVING
   COMPETITIVENESS OF SMEs IN SERBIAN FOOD INDUSTRY . . 433

7. Gnjatović Dragana, Ljubojević Ratko, Milutinović Irina
   OWNERSHIP CHANGES ON ARABLE LAND IN
   THE REPUBLIC OF SERBIA IN HISTORICAL PERSPECTIVE . . . 447

8. Ivančević Savo, Mitrović Dragan, Brkić Miladin
   SPECIFICITIES OF FRUIT FREEZE DRYING AND
   PRODUCT PRICES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 461

9. Jovanović Slobodanka, Sikora Sonja, Petrović Slobodan
   INTELLECTUAL PROPERTY RELATED TO
   TRADITIONAL AND MODERN AGRICULTURE IN SERBIA . . 473
10. Marković Katarina, Njegov Zoran, Pejanović Radovan
FORMER AND FUTURE REFORMS OF COMMON AGRICULTURAL POLICY OF THE EUROPEAN UNION. ................................................. 483

11. Petrović Jelena, Dimitrijević Žarko
AGRICULTURAL DEVELOPMENT OF NIS DEPENDENT UPON SECURE ENERGY SUPPLY. ......................................................... 499

12. Purić Sveto, Purić Jelena, Gligić Savić Anja
AGRICULTURAL PRODUCTION, OCCUPATION AND A WAY OF LIFE. ......................................................................................... 513

13. Rajić Zoran, Novaković Vaso, Gligorić Miladin, Lačnjevac Časlav, Grujić Ranko, Živković Dragiće
EFFECTS OF AERATION ON GROUNDWATER QUALITY FOR IRRIGATION ................................................................. 523

14. Simonović Zoran, Jeločnik Marko, Vasić Zoran
ECONOMIC POSITION OF SERBIAN AGRICULTURE IN THE TRANSITION PERIOD ................................................................. 535

15. Wigier Marek, Darvasi Doina
DIRECT EFFECTS OF THE CAP IMPLEMENTATION IN POLAND - EXPECTATIONS UP TO 2020. ................................................. 547

16. Prikaz monografije
RAZVOJNI ASPEKTI TURISTIČKE DELATNOSTI. ................................. 557

17. Monograph review
ROLE OF MARKETING TOURISM IN DANUBE REGION IN REPUBLIC OF SERBIA .......................................................... 559

18. In memoriam
PROF. DR JEREMIJA SIMIĆ ................................................................. 561